

**FOUR NEW NEOTROPICAL *CEPHALOBYRRHINUS* PIC
(COLEOPTERA: DRYOPOIDEA: LIMNICHIDAE)**

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Abstract.—Four new species of *Cephalobyrrhinus* are described from Central and South America. They are *C. brevis*, *C. robustus*, *C. sedatus*, and *C. lineatus*. The genitalia are figured and a key that will separate the six known species of the genus is included.

Since the publication of my paper on *Cephalobyrrhinus* Pic (Wooldridge, 1977), I have received a number of specimens of the genus from various sources. In addition to extending the ranges of the two known species, the material contained specimens of the following four previously undescribed species. From the ecological data supplied with the specimens it seems clear that the adults of this genus inhabit leaf litter, rotten logs, and decaying vegetation. It is likely that careful collecting in these habitats in tropical regions will reveal still other species.

***Cephalobyrrhinus brevis*, new species**

Fig. 1

Description. Length 1.8 mm, width 1.0 mm, elongate oval, convex. Black to piceous. Head punctuation fine on vertex, closer and coarser on front, clypeus alutaceous. Pronotum with fine, even, lightly impressed punctures except for a row of coarse punctures along side margins; tuberculate series fine, even, rugulose. Elytra with small, confused, barely impressed punctures around scutellum; punctures forming vague rows at sides. Prosternal punctuation fine. Hypomera shining to slightly alutaceous. Metasternal punctuation minute, distant, only slightly closer at sides. Metacoxal plates with fine, lightly impressed punctures. Abdomen polished to faintly alutaceous, punctuation fine, only slightly coarser at sides; second sternum with two depressed circular areas to receive metatarsi. Aedeagus with parameres straight and nearly parallel-sided; penis narrow and tapering evenly to a rounded, acute tip (Fig. 1).

Holotype ♂ and *allotype* ♀. Ecuador, Napo. 600 m (20 km S Tena) VII.11.1976. S. Peck (FMNH).

Paratypes. Ecuador, Napo. 16 spec. Same data as holotype (12 FMNH, 4 USNM); 11 spec. 250 m el., Limoncocha, VI.21.1976. Bactris-spiny palm (FMNH).

***Cephalobyrrhinus robustus*, new species**

Fig. 2

Description. Length 3.2 mm, width 1.9 mm, ovate, convex. Black. Head punctuation fine and distant on vertex, clypeus alutaceous with close punctures. Pronotum with minute, perforate punctuation, tuberculate row short and rugulose. Elytra with seven

long and two short longitudinal rows of deep, coarsely impressed punctures close enough to form partial grooves on disk; punctuation near scutellum small. Prosternum finely punctate; process with a broad, shallow longitudinal sulcus. Hypomera polished, minutely punctate. Metasternum with coarse punctuation, punctures largest on posterior half near midline; metacoxae finely punctate with a few larger punctures at sides. Abdomen finely alutaceous, finely punctate except polished in circular areas on each side of second sternum to receive tarsi. Parameres of aedeagus parallel-sided, evenly curved, diverging from about the middle, tips rounded; penis short, broad, tapering to a rounded tip (Fig. 2).

Holotype ♂ and *allotype* ♀. Peru. 43 mi E Tingo Maria, 1,300 m, XI.18.1954. E. I. Schlinger and E. S. Ross (CAS).

Paratypes. Ecuador, Napo, 3♀, Limoncocha, 10 July 1977, W. E. Steiner (USNM). Pastaza, 1 spec. Cusuimi, Rio Cusuimi, 150 km SE Puyo, 320 m, VII.1-2.1971. B. Malkin (FMNH). Peru, 5 spec. same data as holotype.

***Cephalobyrrhinus sedatus*, new species**

Fig. 3

Description. Length 2.9 mm, width 1.6 mm, elongate oval, convex. Black. Head punctuation small, clypeus alutaceous, punctures becoming fine behind epistomal suture. Pronotal punctuation small, scattered, becoming coarser and closer along lateral margins; tuberculate series short and irregular. Elytra with three long rows and one short row of broad, coarse punctures at sides and a short row past middle along suture; disk flat with small, scattered punctures, punctures obsolete around scutellum. Prosternum with small, scattered punctuation; process broad, somewhat flattened. Hypomera alutaceous. Metasternum polished with minute, scattered punctures; metacoxal plates microreticulate with small, scattered punctures. Abdomen faintly microreticulate with minute punctuation, except polished in circular areas on each side of second sternum to receive tarsi. Aedeagus with outer margins of parameres converging to rounded tips; penis broad, tapering abruptly to an obtusely rounded tip (Fig. 3).

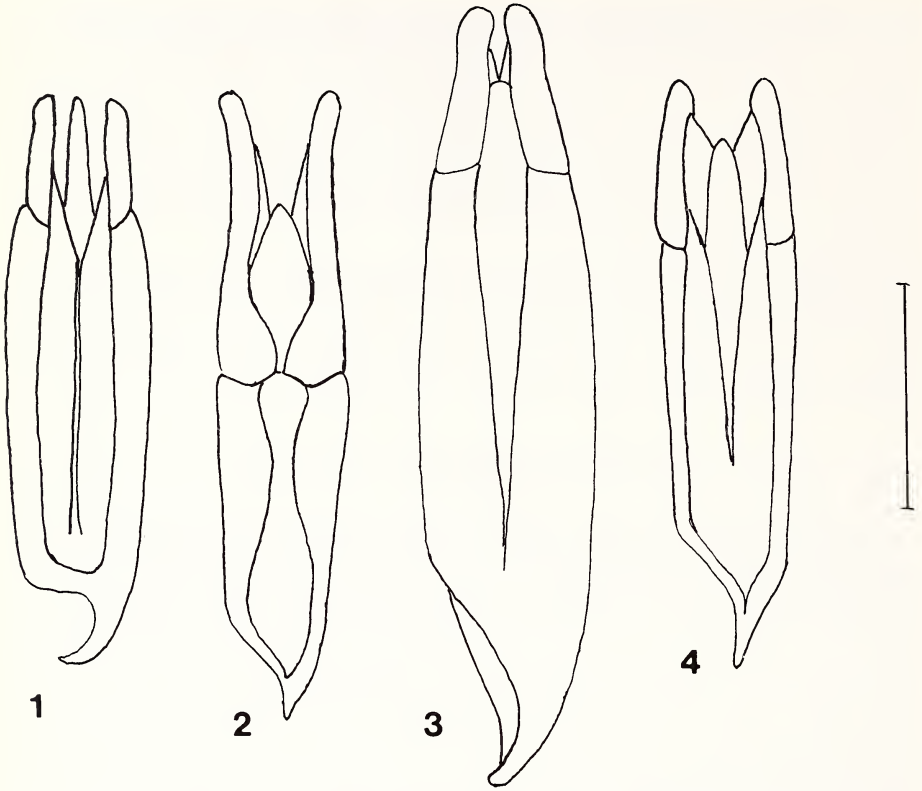
Holotype ♂ and *allotype* ♀. Ecuador, Pichincha. 6 mi W Santo Domingo de los Colorados II.23.55, E. I. Schlinger and E. S. Ross (CAS).

Paratypes. Ecuador, Pich. 7 spec. Same data as holotype (5 CAS, 2 DPWC). 3 spec. 47 km SE Santo Domingo, Rio Palenque Sta., II.22-28.1976, 300 m, S. M. Campbell (CNC).

***Cephalobyrrhinus lineatus*, new species**

Fig. 4

Description. Length 2.0 mm, width 1.0 mm, narrowly elongate, parallel-sided, convex. Black to piceous, ventral surfaces dark red-brown. Head punctuation fine, clypeus alutaceous with larger punctures. Pronotum with fine punctuation on disk, coarser at sides; transverse tuberculate line very fine, more rugulose than tuberculate. Each elytron with seven rows of linear punctures on disk and two shorter incomplete series at sides, punctures distinct but not deeply impressed; scutellar row distinct; only sutural row extended past elytral declivity. Prosternal punctuation fine, distant. Hypomera alutaceous. Metasternum with coarse, broad punctures at sides and around



Figs. 1-4. Dorsal view of aedeagus. 1. *Cephalobryrrhinus brevis*. 2. *C. robustus*. 3. *C. sedatus*. 4. *C. lineatus*. Line equals 0.2 mm.

crural depressions, becoming fine and distant at midline. Metacoxal plates with large, coarse punctures. Abdomen polished between punctures which are larger at sides than at midline; second sternum with two nearly circular, slightly depressed, nearly impunctate areas to receive metatarsi. Aedeagus with parameres parallel-sided and rounded at tips; penis narrow, nearly parallel-sided, evenly rounded at tip (Fig. 4).

Holotype ♂ and *allotype* ♀. Panama, Canal Zone, Barro Colorado Is. II.6.1976, A. Newton. Litter under rotten logs (MCZ).

Paratypes. Costa Rica, 7 spec. Heredia, OTS La Selva Field Sta., Puerto Viejo de Sarapiquí, Rio Puerto Viejo, III.11.1973, J. Wagner, J. Kethley (FMNH); 6 spec. Puntarenas, OSA Peninsula, 5 km W Rincon de OSA, III.24.1973, bat guano inside hollow log, J. Werner, J. Kethley (FMNH); 2 spec. same data except III.25.1973 (FMNH); 7 spec. same data except forest floor, III.30.1973 (FMNH). Panama, 3 spec. Bocas del Toro, Almirante, trail to dam on Nigua Cr. III.25.1951, H. S. Dybas (FMNH); 1 spec. same data except III.31.1959 (FMNH); 5 spec. same data as holotype (MCZ); 9 spec. same data as holotype except II.13.1976 (MCZ); 5 spec. same data as holotype except II.17.1976 (MCZ); 6 spec. Canal Zone, Achiote Rd. 9 mi

SW Gatun, VI.19.76. A. Newton (MCZ). 1 spec. Panama, Cerro Campana 3,200 ft
 II.1976, A. Newton (MCZ).

KEY TO THE SPECIES OF *CEPHALOBYRRHINUS*

1. Pronotal series of tuberculate punctures broad and irregular, punctures greatly raised (Mexico to northern Venezuela) *curticornis* Pic
- Pronotal series of tuberculate punctures narrow, punctures often minute and rugulose in appearance 2
- 2(1). All metasternal punctation fine and even 3
- Metasternal punctation varying from minute to coarse and broad 4
- 3(2). Prosternal row of tuberculate punctures short and irregular; size greater than 2.75 mm (Ecuador) *sedatus*, n. sp.
- Prosternal row of tuberculate punctures straight; size less than 2.0 mm (Ecuador) ..
 *brevis*, n. sp.
- 4(2). Metasternal punctation distinctly larger at sides 5
- Metasternal punctation distinctly larger in central portion, leaving a finely punctate area behind crural cavities and in front of metacoxae; size large, over 3.0 mm (Ecuador & Peru) *robustus*, n. sp.
- 5(4). Several rows of elytral punctures continuing past declivity (Ecuador, Bolivia & Peru) *impressopunctatus* Wooldridge
- Only the sutural row of elytral punctures distinct past declivity (Costa Rica & Panama) *lineatus*, n. sp.

ACKNOWLEDGMENTS

Thanks are due to the following individuals and institutions for the loan of material. The abbreviations are those used to indicate distribution of type material and in general this corresponds to the source of the material.

D. H. Kavanaugh, California Academy of Sciences, San Francisco, Calif. (CAS); A. Smetana and L. LeSage, Biosystematics Research Institute, Agriculture Canada, Ottawa, Ont. (CNC); H. Nelson, Field Museum of Natural History, Chicago, Ill. (FMNH); M. Thayer and A. Newton, Museum of Comparative Zoology, Harvard University, Cambridge, Mass. (MCZ); and P. J. Spangler, National Museum of Natural History, Washington, D.C. (USNM). Those specimens labelled DPWC are retained in the author's collection.

LITERATURE CITED

Wooldridge, D. P. 1977. New World Limnichinae II: *Cephalobyrrhinus* Pic (Coleoptera: Limnichidae). Entomol. News 88(1&2):29-32.

Received December 6, 1985; accepted April 9, 1986.